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ABSTRACT

The America Reads challenge makes a national commitment to the goal that every child will read independently and well by the end of the third grade. The primary means of achieving this goal is to place one million volunteers in schools to tutor children in reading. However, little is known about the effectiveness of using volunteer tutors in the schools. This report reviews 16 volunteer tutoring programs, most of which were implemented in urban schools. Only two of these programs had an evaluation comparing equivalent treatment and comparison groups to determine the effectiveness of the program, and five of the programs had no evaluation at all. Evidence from the two comparative evaluations did show a correlation between the number of tutoring sessions and learning gains, but it is unclear at this point whether volunteer tutoring programs can have a significant impact on student reading performance, or what types of programs are likely to be effective. Volunteer tutors may be able to contribute to children's reading progress, but a great deal of research, development of replicable models, and evaluation of alternative models is needed if the potential of volunteer tutoring is to be raised. An appendix describes program elements in chart form. (Contains 21 references.) (Author/SLD)

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CRESPAR

VOLUNTEER TUTORING PROGRAMS

A Review of Research on Achievement Outcomes

Barbara A. Wasik

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CENTER FOR RESEARCH ON THE EDUCATION OF STUDENTS PLACED AT RISK

Johns Hopkins University & Howard University

VOLUNTEER TUTORING PROGRAMS

A Review of Research on Achievement Outcomes

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Report No. 14

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The Center

Every child has the capacity to succeed in school and in life. Yet far too many children, especially those from poor and minority families, are placed at risk by school practices that are based on a sorting paradigm in which some students receive high-expectations instruction while the rest are relegated to lower quality education and lower quality futures. The sorting perspective must be replaced by a "talent development" model that asserts that all children are capable of succeeding in a rich and demanding curriculum with appropriate assistance and support.

The mission of the Center for Research on the Education of Students Placed At Risk (CRESPAR) is to conduct the research, development, evaluation, and dissemination needed to transform schooling for students placed at risk. The work of the Center is guided by three central themes — ensuring the success of all students at key development points, building on students' personal and cultural assets, and scaling up effective programs — and conducted through seven research and development programs and a program of institutional activities.

CRESPAR is organized as a partnership of Johns Hopkins University and Howard University, in collaboration with researchers at the University of California at Santa Barbara, University of California at Los Angeles, University of Chicago, Manpower Demonstration Research Corporation, WestEd Regional Laboratory, University of Memphis, and University of Houston-Clear Lake.

CRESPAR is supported by the National Institute on the Education of At-Risk Students (At-Risk Institute), one of five institutes created by the Educational Research, Development, Dissemination and Improvement Act of 1994 and located within the Office of Educational Research and Improvement (OERI) at the U.S. Department of Education. The At-Risk Institute supports a range of research and development activities designed to improve the education of students at risk of educational failure because of limited English proficiency, poverty, race, geographic location, or economic disadvantage.

Abstract

The *America Reads Challenge* makes a national commitment to the goal that every child will read independently and well by the end of third grade. The primary means of achieving this goal is to place one million volunteers in schools to tutor children in reading. However, we know very little about the effectiveness of using volunteer tutors in our schools. This report reviews 16 volunteer tutoring programs. Only two of these programs had an evaluation comparing equivalent treatment and comparison groups to determine the effectiveness of the program. Five of the programs had no evaluations at all. It is unclear at this point whether volunteer tutoring programs can have a significant impact on student reading performance, and what types of programs are most likely to be effective. Volunteer tutors may be able to contribute to children's reading success but a great deal of research, development of replicable models, and evaluation of alternative models is needed if the potential of volunteer tutoring is to be realized.

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Introduction

The *America Reads Challenge* makes a national commitment to the goal that every child will read independently and well by the end of the third grade. This is a goal of great importance; forty percent of all our nation's children are now reading below the basic level on national reading assessments. This challenge has elevated the importance of reading and education in children's lives. Children who do not learn to read in the early grades begin life's journey on a path of failure and poverty.

The primary component of the *America Reads Challenge* is the use of volunteers to tutor children in our schools. As many as one million tutors will be working with children to help them learn to read. An estimated $2.75 billion is proposed to be invested in this initiative. Although this is an ambitious and important challenge for America's children, there are several issues regarding volunteers and the role that they play in schools that need to be carefully addressed if this program is to have an important impact on the reading performance of young children.

The most important factor in the success of the *America Reads Challenge* is how these volunteers are to be effectively used in schools. This has not been systematically addressed. All over America, school administrators, principals, and community activists are scrambling to identify and/or develop volunteer tutoring programs that can be used in their schools. Unfortunately, there are few guidelines for selecting or developing these programs. Before millions of volunteers enter our schools, it is important to systematically examine the role they can play and the kind of training they will need to be effective in their volunteer role.

There are literally hundreds of grassroots tutoring programs that have been developed and are being used in schools. There is great variation among these programs. Some have very well developed training programs for tutors; others do not. Some of the programs have written materials for the tutors to follow; other programs rely mostly on oral dissemination of information. Some have student materials; most do not. Also, since many of these programs were developed to fulfill a specific need in a particular school, little attention has been paid to evaluating or disseminating the programs. What has occurred is that many programs are being implemented across school districts with little evidence of their effectiveness.

The purpose of this report is to provide a comprehensive review of the current state of knowledge about the achievement effects of various volunteer tutoring programs in reading. If *America Reads* is to achieve its ambitious goals, it is essential for its tutoring programs to have research supporting their effectiveness.

Currently, there is very little work documenting the effectiveness of adult volunteers as reading tutors. Wasik and Slavin (1993) reviewed five tutoring programs that used certified teachers and paraprofessionals. The findings from this review document two important conclusions. First, one-to-one tutoring is an extremely effective form of instruction. The primary drawback of tutoring is the high cost of providing these services to children. Second, and equally important, is that programs that used certified teachers as tutors appeared to obtain substantially larger impacts than those that used paraprofessionals. Further, in the programs that used paraprofessionals effectively to help children learn to read, a key aspect was that the paraprofessionals were highly trained and the program was highly structured with specific tutors' manuals, student materials, and training procedures, so that paraprofessionals were provided with information that guided their decision making in tutoring children in reading.

Two of the programs reviewed by Wasik and Slavin (1993) are important to understand as a backdrop to the current interest in volunteer tutoring. The most important of these is Reading Recovery, a tutoring program for at-risk first graders originally developed in New Zealand (see Pinnell, DeFord, & Lyons, 1988). This program, currently used in more than 6000 U.S. schools, has excellent evidence of effectiveness for first graders who receive it. However, it is very expensive, averaging $5000 to $8000 per child (Shanahan & Barr, 1995), because it uses certified teachers as tutors and provides expensive professional development to all of them. The success of Reading Recovery, and its expense, have led researchers and educators to search for less expensive means of producing similar outcomes. Several of the volunteer tutoring programs reviewed here are explicitly based on Reading Recovery; in fact, Reading Recovery researchers at Ohio State developed one of the models to use AmeriCorps volunteers to serve children who are less at-risk than those served by Reading Recovery.

The second influential tutoring program is one that is part of Success for All (Slavin, Madden, Dolan, & Wasik, 1996), a schoolwide reading model used in about 500 mostly high-poverty elementary schools. Success for All provides curriculum reforms, schoolwide professional development, and family support services in addition to one-to-one tutoring from certified teachers and paraprofessionals for the lowest achieving first, second and third graders. Research on Success for All has also shown substantial positive effects, but like Reading Recovery it is expensive, and the tutors are a major portion of the expense. As a practical matter, it would be a major contribution to find volunteer tutoring programs that have even half the impact of Reading Recovery and Success for All, as this would enable far more children to be served with some degree of success. Even in conjunction with these programs or others of similar intensity, effective volunteer tutoring programs could help a greater number of children benefit from one-to-one attention at a critical point in their literacy development.

A Cautionary Note

Often people believe that if you can read, you can teach someone else to read. This may be true in teaching young children who are highly motivated and who are prepared to learn to read. Yet for most of the 40% of children who reach the third grade reading poorly or not at all, this is highly unlikely. Teaching at-risk children to read is a very complex process. First, it entails an understanding of grapheme/phoneme relationships, phonological processing, and other aspects of decoding. In addition, reading instruction requires a firm foundation in concepts of print, word awareness, comprehension fostering activities, and other components of proficient reading. To believe that anyone can teach reading is as naive as saying that anyone can with a little training do brain surgery. This is not to say that volunteers cannot learn teaching skills that would supplement instruction provided by skilled teachers. However, an appreciation of the complexity of the reading process will help us in the evaluation of programs designed for volunteers who are not trained as teachers.

Review Methods

The goal of this review is to examine the effects of community adult volunteer tutoring programs on reading achievement outcomes in young children. Research that examines the effects of certified teachers and paraprofessionals (see Wasik & Slavin, 1993), the effects of other tutoring on variables such as self-esteem (see Cohen, Kulik, & Kulik, 1982; Robledo, 1990), and the effects of parents as tutors for their own children (Topping & Whitely, 1990) were not included in this review. In addition, research that examined the effects of cross-aged or peer tutoring was not included. (For a review of peer tutoring data across all subject areas, see Cohen et al., 1982). This review focuses on adult volunteers as reading tutors, who are primarily the people volunteer tutoring programs recruit as tutors. There are many issues including level of commitment and skill level that are specific to community volunteers which are not shared by peer or cross-age tutors who are a consistent part of the structure of a school.

Initially, this review was intended to focus on volunteer tutoring programs that have been evaluated through comparisons of similar experimental and control groups whether randomly assigned to treatments or matched based on variables such as pretests and socioeconomic status, a minimal requirement for program evaluation. After conducting an ERIC search of educational and psychological journals and unpublished dissertations, this requirement would have limited the scope of the review to only two programs. Therefore, to expand the scope of this review, the inclusion criteria were expanded to include programs that

are widely used but have less rigorous evaluation designs, such as pre- to posttest gains in normal curve equivalents or percentile ranks. Because these programs were not compared to control or comparison groups, it is difficult to determine if the gains they report in student performance are the result of the program intervention or are gains that would have been made without an intervention. Inclusion in this review is by no means meant as an indication that programs are effective.

In addition to programs that have evaluations, the programs highlighted in documentation distributed as part of the *America Reads Challenge* were also reviewed. This was done to provide information on programs that are receiving considerable attention and to help schools to decipher information being presented to them on volunteer tutoring programs.

Whenever possible, effect sizes were computed on the evaluation data. Effect sizes are calculated by subtracting the control group's mean scores on a specific measure from the treatment group's scores and dividing by the control group's standard deviation. An effect size of +.25 or more is considered an educationally meaningful difference. For example, a treatment effect of this size would be roughly equivalent to a gain of four IQ points, 25 points on the SAT, or half of a stanine. In some cases gain scores and correlations are presented.

The following program reviews provide a brief description of each program's processes and materials, the evaluation data on each, and information pertinent to dissemination of the program. The programs with the most rigorous evaluations are presented first, then programs with less rigorous evaluations are discussed, and finally programs without evaluations are presented. The elements of each program are presented in table form in the Appendix.

Howard Street Tutoring Program

The Howard Street Tutoring Program, one of the two programs evaluated using a comparison group, is a small community-based after-school tutoring program which was developed in 1979 as a joint venture of the National Reading Center at the National College of Education in Evanston, Illinois and the Good News Educational Workshop, a community organization in a poor neighborhood in the North Side of Chicago (Morris, 1990). The goal of the program is to provide volunteer services to second- and third-grade students who were having difficulty in reading. Morris, Shaw, and Perney (1990) explained that the program did not focus on first graders because the tutoring program began in the fall of the school year and it is too early at that time to identify first graders who are failing in reading. However, our

review of the program indicates that it could easily be adapted for first graders and implemented before the students have had the opportunity to fail.

Students are selected for the tutoring program based on their performance on informal reading and spelling measures. These measures are administered by a school-based reading specialist. Students who scored the lowest on the pretest measures are selected to fill the slots available for tutoring.

The volunteer tutors vary from undergraduate college students to suburban mothers to retirees. Tutors are not paid. The tutor training consists of on-the-job training. Tutors begin working with a tutoring supervisor. The supervisor models a tutoring session with a child while the volunteer tutor observes. After this session, the supervisor and the tutor discuss the techniques used in this session. During the next session, the volunteer tutor is observed by the supervisor. The supervisor provides feedback and comments on the tutoring session. This one-to-one modeling and feedback continues for approximately three to four sessions or until the supervisor is satisfied with the tutor's performance. After this observation period, the tutor continues to work independently with the student.

After the initial training, the supervisor develops lesson plans for each tutor to use with each student. This is a labor intensive activity which requires a skilled reading specialist. Tutors are also provided with a tutoring manual which outlines the basic components of the tutoring session as well as the suggested time allotted for each component. These components are theoretically based and are similar to the components of Reading Recovery tutoring sessions. For example, reading at the child's instructional level takes 15-20 minutes, word study takes 10-12 minutes, and writing takes about 15 minutes. Students are tutored in one-hour sessions twice a week for a minimum of one year.

Materials required for this program are basal readers, trade books, and word cards. The cost of the program, in addition to these materials, includes a salary for a trained reading specialist to supervise the tutors.

Evaluation. The evaluation of the Howard Street Tutoring model involved fifty second and third graders in an inner-city Chicago neighborhood who were screened and pretested on word recognition measures, spelling, and basal reading passages. These measures were adapted from standardized measures, but none of the measures in themselves were standardized. Students were matched on the word recognition score and randomly assigned to either the control or treatment group. Over the course of the school year, the tutored children received an average of 50 hours of one-to-one instruction in reading. Given the availability of tutors and student mobility, posttesting was based on 17 matched pairs at the end of the first year of the

evaluation and 13 different matched pairs of students at the end of the second year of the evaluation.

Students were posttested on the same reading and spelling battery that was used as a pretest. Data from the Year 1 evaluation showed overall positive effects for the tutored group over the control group. On the measures of general word recognition (ES = +.25) and basal word recognition (ES = +.61), the tutored group recognized more words than the non-tutored group. On the basal passage which required oral reading, the tutored group performed substantially better than the non-tutored group (ES = +1.07). The spelling scores also showed that the tutored children spelled more words correctly than the non-tutored children (ES = +.82). Data from the second year evaluation showed similar findings. Word recognition scores for timed and untimed performance showed that the tutored group performed better than the non-tutored group (ES = +.58 and +.38 respectively). On basal word recognition, the tutored group performed better than the non-tutored group (ES = +.68). On the basal passage assessment, a measure of oral reading, the tutored students were able to read more effectively than non-tutored students (ES = +1.77). Tutored students outperformed non-tutored students on spelling (ES = +.82). These data are based on a small sample of children, but clearly support the effectiveness of the Howard Street Tutoring Program.

Dissemination Issues. The Howard Street Tutoring Program requires a skilled supervisor to monitor the tutors and to write individual lesson plans for the children. The supervisor is paid but the volunteers are not. Information on monitoring and developing lesson plans is not clearly documented, so dissemination of this aspect of the program would be difficult. There is a manual which includes the various components of the program. The materials for this program are not standard. Available basal readers and trade books are used in the program.

The Howard Street Tutoring Program is still in existence in Chicago but its author, Darrell Morris, is now at Appalachian State University in Boone, North Carolina, and has implemented similar programs in Western North Carolina. His current project, *First Steps* (Morris, 1995), is a first grade one-to-one tutoring program which trains certified teachers to work with children who are at risk for reading failure.

School Volunteer Development Project

The School Volunteer Development Project was developed in Dade County, Florida, as an intervention for second through sixth graders who were having difficulty in reading. This

program is no longer being implemented. Community volunteers tutored children for a half-hour a day four or five times a week. Tutors were trained prior to tutoring in a variety of tutoring skills and use of multimedia materials and also worked with a reading specialist on the skills that they were tutoring.

Evaluation. Fifty students were randomly assigned to tutored or untutored groups. All students were pre-and posttested on the Metropolitan Achievement Test (MAT). After one year of tutoring, students who received tutoring gained .50 standard deviations more in reading than the untutored group. These data support the effectiveness of this tutoring project on children's reading.

Dissemination Issues. This program was terminated during the 1980's.

Book Buddies

Book Buddies is a program developed by Marcia Invernizzi and Connie Juel and their colleagues at the University of Virginia. The goal of this program is to provide low-cost, one-to-one tutoring to first graders who are having difficulty learning to read. Invernizzi and her colleagues (Invernizzi, Rosemary, Juel, & Richards, 1997) argue that with intensive and structured training and ongoing supervision, volunteers can be trained to work effectively in helping at-risk children to read.

A volunteer recruiter solicited interested community members through media, public meetings, and business associations to work in the schools. In the first three years of this program, a maximum of 15 community volunteers per school were placed in six elementary schools in the Charlottesville City, Virginia School District. First graders were tutored twice a week for 45 minutes each time. This program mainly provides pull-out services but could be adapted for use after school.

The Book Buddies' training is twofold. The program developers, who are university-based reading researchers, provide an initial two-hour training session and two additional sessions throughout the school year. Each of these sessions incorporates video demonstration lessons of actual tutoring sessions and a walk-through of the tutoring lesson plan. The training sessions are modeled on the format of teachers' professional conferences, with whole group presentations which focus on reading methods and theory and small group workshops which allow the volunteers to ask questions and discuss the information presented.

In addition to these training sessions, a graduate student or a former graduate student in reading education serves as an on-site reading coordinator at each school to provide ongoing training and supervision to the volunteers. The reading coordinators supervise the tutors on a daily basis, assessing the children, preparing lesson plans for the volunteers to implement, and gathering the appropriate materials that the tutors need in order to carry out the lesson plan. In addition, they model tutoring sessions, observe the volunteers, provide feedback and support to the tutors as they work with the students, and provide the volunteers with one-to-one instruction on becoming reading tutors. Tutors also have access to a tutoring manual which outlines the tutoring methods and guidelines (Johnston, Juel, & Invernizzi, 1995).

The reading coordinators work 17 hours a week at an hourly wage comparable to that of part-time professionals. They supervise a maximum of 15 volunteer tutors along with their students. These reading coordinators also receive training from the university researchers on topics related to reading education and working with children who are at risk for reading failure.

The tutoring lesson is structured and the volunteers are trained in each component of the lesson. Tutoring sessions consist of four components: (a) rereading familiar storybooks, (b) word study, (c) writing, and (d) reading a new story. This model is similar to the tutoring lessons in the Howard Street Tutoring Program and Reading Recovery.

The cost per child for this program is estimated at $595.00. This figure includes the salaries of the reading coordinator and the volunteer recruiter, and all the books and materials used in the program.

Evaluation. The evaluation of Book Buddies was originally designed to compare a treatment group to a control group of children who were on the waiting list. However, the agreement with the school district to work with the neediest children made this evaluation design impossible. Instead, only pre- to posttest gains were compared for data on three cohorts of children.

All children were pre- and posttested on four measures: alphabet knowledge, concept of word knowledge, phoneme-grapheme knowledge, and word recognition in isolation. Three of the pretest measures, alphabet proficiency, concept of word, and phoneme-grapheme knowledge, were unrelated to the number of sessions that the children received. However, pretest performance on word recognition was significantly correlated with number of sessions. The higher the pretest word recognition score, the fewer the number of tutoring sessions.

Given these data, Invernizzi and her colleagues compared the effects for children who had a high number of tutoring sessions compared to children who had a low number of

sessions. The number of sessions ranged from 6 to 63. The median number of 40 sessions was decided on as the dividing point; those who received less than 40 sessions were placed in the low-session group and those who received 40 sessions or more were placed in the high-session group. An analysis of variance (ANOVA) was conducted on the data collapsed across the three cohorts. Significant differences were reported between the two groups, with the children in the high-session group outperforming the children in the low-session group on phoneme-grapheme knowledge and word recognition in isolation but not on alphabetic knowledge and concept of word knowledge.

There are several problems with this analysis. The most important is that there is no comparison group with which the tutored groups could be compared. It is entirely possible that there were systematic reasons (such as poor attendance) that some children might have received fewer sessions, and these differences could have affected the outcomes. In fact, Invernizzi et al. (1997) report that although the children in the low-session group were not different from the others in terms of poverty level, they were absent more from school. The increase in reading scores could also be the result of parent involvement and motivation to have their children read (and attend school), and not the tutoring program itself.

The Book Buddies program is a well designed, systematic program developed by researchers who are experts in the field. It would be important to conduct a study with a comparison group to affirm the effects of this program.

Dissemination Issues. Book Buddies has been disseminated to six schools and is in the process of being implemented districtwide in Charlottesville. There are video tapes of effective tutoring sessions and a manual that is used by the tutors. The training for the reading coordinators on-site would need to be developed so that they could be trained by people other than the researchers at the University of Virginia.

The cost of the program would include the salaries of reading coordinators at each school and student materials, which include a variety of books such as the *Ready Readers* (Modern Curriculum Press) and other phonetic readers and easy-to-read trade books.

Reading One-One

Reading One-One is a program developed by George Farkas and his colleagues at the University of Texas at Dallas in collaboration with the Richardson Independent School District. The goal of the program is to have volunteers tutor first, second, and third graders who are having problems in reading. It is designed as a pull-out, in-school program.

Students are selected for tutoring based on their performance on the Iowa Test of Basic Skills. Children in grades 1 through 3 who score at the 40th percentile or less are identified as potential candidates for tutoring. Of this potential group, teachers then selected the children most in need of additional services.

Initially, college students were recruited as tutors, but recruitment has expanded to include community volunteers. Volunteers are paid approximately $7.00/hour. This money comes from the schools' Title I funds. Being a paid volunteer offers certain benefits in making the tutoring program more structured. In order to maintain consistency for the children, the tutors are asked to make a commitment to the program of at least six months and at least two hours a day, twice a week. There are also absenteeism and lateness policies which help to ensure the consistency of the tutor with the student. The average tutor works 15 to 20 hours a week.

The tutors are trained using the Reading One-One Tutoring Manual (adapted from the *Success for All Tutor's Manual*), and they are assessed on their understanding of the concepts presented in the manual. This manual details the components of the tutoring sessions and the assessment techniques used for determining the skill levels of the student. Tutors are observed and provided feedback by more experienced tutors called "lead tutors." The lead tutor uses a checklist to evaluate whether the tutor is performing adequately and to identify areas in the tutor's approach and skills that need to be addressed. This observation and feedback is done for about four to six weeks, depending on the skill level of the tutor. Tutors are also encouraged to discuss concerns about students with either the lead tutor or with central staff at the University of Texas-Dallas.

Students in Reading One-One receive tutoring a minimum of three and a maximum of four sessions per week. Tutoring sessions are approximately 30 to 35 minutes. Because of tutors' schedules, most students are tutored by two different tutors. There are forms used to communicate between tutors about students they share.

Reading One-One uses the basal readers children use in their classroom as well as the *Sunshine* books, easy-to-read mini-books published by the Wright Group.

Evaluation. There are pre- and posttest data on students in Reading One-One but no comparison group. Therefore, it is impossible to determine if the students improved because of the tutoring intervention or because of ordinary classroom instruction or other factors.

Farkas (1996) presents correlational data to support the effectiveness of his tutoring program. Using a regression equation, the number of tutoring sessions along with 10 other

variables (such as limited English proficiency, repeating a grade, and free lunch), are used to predict students' scores on the Woodcock Reading Comprehension Test.

Farkas extrapolates from the observed correlation between number of tutoring sessions and outcome to predict student performance at zero and 100 tutoring sessions, and then reports the difference between these, 7.3 months, as the program effect.

There are several problems with this analysis. First, the predicted impact of the theoretical regression equation is based on children who received zero to 100 tutoring sessions. In actuality, no student received zero tutoring sessions. The minimum amount was 25 sessions. In addition, as Farkas (1996) states, "the average student received only 60 tutoring sessions" (p.165), and 100 tutoring sessions is the "high end of what students typically receive" (p.167). Therefore, the 7.3 months gain reported for students in Reading One-One is an extrapolation outside of the range of actual observation, and is speculative. Further, there is no control for self-selection. Students with fewer tutoring sessions could have been those who were absent a great deal.

Dissemination Issues. Reading One-One has a tutoring manual which describes the various components of the program, and the program is building a national training capacity. Among volunteer tutoring approaches, the program is relatively expensive, as the tutors are paid and each school requires a skilled supervisor to monitor the tutors.

Help One Student To Succeed (HOSTS)

Help One Student To Succeed (HOSTS) (HOSTS Corporation, 1994; Gallegos, 1995; Wilbur, 1995) is a volunteer tutoring and mentoring program designed for first through sixth grade children who are at risk for school failure. The HOSTS program can be used either as a pull-out or an after-school program, depending on the needs of the individual school.

HOSTS schools recruit community volunteers from businesses, universities, and local churches and also use peers and older students to serve as tutors. Typically, volunteers are not paid. The HOSTS school appoints a teacher, who is often the Title I resource or reading teacher, to organize the HOSTS materials, to coordinate the volunteers, and to develop diagnostic plans for each student.

Teachers/coordinators have three days of initial training, during which they review the HOSTS materials and are instructed in how to make a diagnostic plan. An additional three days of training are scheduled throughout the first year. In addition to this organized training, there

is a HOSTS "hot line" that the teachers/coordinators can call to ask questions and receive guidance.

The training for the volunteer tutors is also ongoing. Training takes place at the school and is done by the teacher/coordinator. There are two hours of initial training. When the tutors meet with their students, the teacher/coordinator is expected to be present in order to answer any questions and provide feedback on the tutoring sessions. Additional training can vary from school to school and is determined by the teacher/coordinator.

HOSTS is a structured, systematic program. Each child is assessed to determine his or her individual strengths and weaknesses. Using a computer-based management system, the teacher/coordinator identifies the student's areas of weakness and cross-references materials that can be used to work on specific skills. The volunteer tutors follow a computer-generated lesson plan that outlines the skill areas in which each child needs help. The materials to work on the skills are included with the program. The lesson plans used by the tutors focus a significant amount of time on isolated skills and a minimal amount on having the children actually reading books. Although a tutor may work on a skill area that the child is also having problems with in his/her regular classroom, the materials used in HOSTS are not expected to be well-coordinated with what is used in the classroom.

There are over 3,400 learning materials available as a part of this program. Materials include worksheets to identify word families, sight words, and categorization activities. A small number of books are a part of the program, but reading is not the major focus of the program.

Evaluation. HOSTS evaluations have not included pre-post testing of experimental and control groups. Therefore, it is not possible to comment with certainty on the effectiveness of the program.

Data were collected for a Title I national validation (HOSTS, 1994) in which a multi-state study examined NCE gains. The results showed that in a spring to spring evaluation, first, second, and third graders made substantial NCE gains (15, 25, and 25 respectively). These NCE gains exceeded those of the school and the state.

Dissemination Issues. Since its inception in Vancover, Washington, in 1972, HOSTS has involved over 150,000 students and 100,000 volunteer tutors in more than 400 schools throughout the country. There is a systematic training sequence as well as a significant amount of materials. The cost of HOSTS' materials and the computerized diagnostic program is approximately $5000 per school plus the salary of the teacher/coordinator.

Reading Recovery/AmeriCorps

In a pilot project in three Reading Recovery schools in Ohio, AmeriCorps volunteers have been trained to tutor children who are having problems learning to read. Reading Recovery is a well researched, one-to-one tutoring program focusing on early intervention for first graders who are at risk for reading failure (Pinnell et al., 1988). The goal is to train AmeriCorps volunteers so that additional resources can be provided to high poverty Title I schools.

The AmeriCorps volunteers make a full- or part-time commitment to the school in exchange for a small stipend. The volunteers tutor children 2 to 3 times a week for 30 minutes. The AmeriCorps volunteers do not tutor the children who have been identified as being in need of Reading Recovery, who are children reading in the lowest 20% of their class. Instead, AmeriCorps volunteers tutor children who are reading better than the children who have met the criteria to be included in Reading Recovery but who are still reading below the average expected for first grade.

In addition to providing one-to-one tutoring, the volunteers assist teachers in the Early Learning Literacy Initiative (ELLI), the whole-class reading instruction component often implemented with Reading Recovery.

AmeriCorps volunteer training is extensive. The volunteers receive approximately 150 hours of training. For two weeks in the beginning of their assignment, the volunteers participate in classroom training during which they learn about reading instruction and theory, techniques used to help children who are having reading problems, and general strategies used by Reading Recovery tutors. In addition, the volunteers observe experienced Reading Recovery tutors, called teacher leaders, working with students. The AmeriCorps volunteers spend an additional week tutoring students while they are observed and provided feedback by a Reading Recovery teacher/leader. During the year, the AmeriCorps volunteers meet with teacher leaders once a week for two hours to discuss students and effective strategies to help children read.

For a volunteer tutoring program, the training that the AmeriCorps volunteers receive is very sophisticated. However, it is only a fraction of the training that a certified teacher wanting to become a Reading Recovery tutor would receive.

The volunteers are given the materials that the Reading Recovery tutors use, which include $700 worth of classroom books, easels, and magnetic letters which are shared between two volunteers.

Evaluation. A pre-post evaluation has been conducted by the Reading Recovery researchers. Pre-post data without a comparison group do not allow any conclusions to be drawn about the effectiveness of the intervention. However, these data do tell something about measures on which gains have been made. Students were pre- and posttested on Reading Recovery measures which included word knowledge, letter identification, concepts of print, and text reading. On word knowledge, letter identification, and concepts of print, the students who were tutored by the AmeriCorps volunteers increased by two stanine scores (personal communication, February 26, 1997). However, on text comprehension, which is a measure of oral reading and comprehension, no differences were found. De Ford (1997) hypothesizes that these results suggest that volunteer tutors can have an impact on basic processing skills such as letter identification and word knowledge. However, on more complex processes required in text comprehension, they hypothesize, volunteer tutors may not have enough training to have an impact. Teaching text comprehension requires an advanced understanding of reading and information processing, so volunteer tutors are less likely to influence that outcome. There are other possible explanations for these results. One possibility is that children's performance on letter identification and concepts of print reached ceiling levels, which is possible with these measures, but less likely to occur on comprehension measures. The only way to truly understand the effects of this program is to conduct an evaluation with a comparison group.

Dissemination Issues. In Reading Recovery schools, volunteer tutors could provide additional services to children who need help in reading. However, because the training is extensive and specific to Reading Recovery, it would be difficult to disseminate this model in a non-Reading Recovery school. Since there are more than 6000 Reading Recovery schools in the United States, this is not a major limitation.

Intergenerational Reading Program

This program is a joint venture among Jerome Kagan of Harvard University, the American Academy of Arts and Sciences, Boston Partners in Education, and the Boston Public Schools. The goal of the program is to improve the reading skills of first grade students.

There are six schools in the Boston area involved in this project. One-to-one tutoring is provided three times a week for 45 minutes to a total of 70 first graders. This has been a pilot program for the past three years and is currently being evaluated. The intention is to expand nationally as the program is refined and prepared for dissemination.

Volunteers are senior citizens recruited from various community groups. Some are part of a foster grandparent project in which seniors commit to working a designated number of hours in a school in exchange for a small stipend; some are former teachers who had worked with the Boston Partners in Education, and some are senior citizens in the community wanting to contribute to their local schools.

There is a volunteer coordinator who is a certified teacher. The responsibilities of this coordinator include scheduling and training the volunteers in each school. Initially, the volunteers receive three blocks of three-hour training sessions. During this training, the tutors are instructed in the basic format of the tutoring sessions and introductory concepts in teaching reading, such as concepts about print and phonics. After the initial training, tutors meet twice a month for follow-up training. One training a month is done with the small group of tutors at individual schools. This allows the issues which pertain to a specific school to be addressed and also allows the tutors opportunities to share their experiences. The other monthly meeting is conducted with all the tutors across the six schools and is similar to an in-service meeting. During this meeting, guest speakers discuss topics on reading, or the tutors are trained in specific techniques that can be used during tutoring sessions. In addition to undergoing training, tutors are asked to keep daily logs on each of the children whom they are tutoring. Many of the techniques used in this program are modeled after strategies used in the Reading Recovery program (Pinnell et al., 1988).

Because this program is in the process of being developed, materials and a tutoring manual are not yet complete. The tutor coordinator has been documenting the training component.

Evaluation. This program is in the process of being evaluated and posttest data will be collected in the spring of 1997. Since this program is being evaluated using a treatment and comparison group, and children were randomly assigned to either group, the results from this study will contribute significantly to our understanding of the effectiveness of a volunteer tutoring program with very well-trained tutors. In the fall of 1996, pretest data were collected on 140 first graders who were identified by their teachers as having difficulty learning to read. All students were pretested on components of the Reading Recovery assessment, including assessments of concepts of print as well as oral reading skills and comprehension. Students were randomly assigned to either the tutoring group or the no-services group. The tutoring has taken place over the 1996-1997 school year. Posttesting on the same measures administered in the beginning of the program will be conducted in the spring of 1997.

Reading Together

Reading Together is a community supported, intergenerational tutoring program developed by Susan Neuman of Temple University. Reading Together engages VISTA volunteers to work with parents in the community to participate in teaching their children to read. Like AmeriCorps volunteers, VISTA volunteers are paid a small stipend for their services. The focus of the VISTA volunteers is to mobilize the community to help serve itself. Parents were recruited to work with economically disadvantaged kindergartners and pre-first graders to provide additional opportunities to read and write in a playful context.

Based on previous work by Neuman & Gallagher (1994), the VISTA volunteers developed literacy "prop boxes" to be used as the bases for activities that the parents would share with the children. Each prop box was thematically-based and contained four main components: a jingle or a finger-play song related to the theme of the box, storybooks that were related to the theme, play objects that could be used in acting out an activity related to the theme, and a blank writing book that the children could use for composing. For example, a prop box on a post office theme would include songs or finger plays about the post office or mail delivery, storybooks such as the *Jolly Postman*, objects such as stamps, envelopes, and a mail bag which are used in creative play, and blank paper so the children could have the opportunity to write about this topic.

The VISTA volunteers, along with the university reading researcher, trained the parents to use the prop boxes. The researcher met with the VISTA volunteers once a week to discuss issues ranging from emergent literacy to recruitment strategies. The VISTA volunteers then trained the parent volunteers in the use of the prop boxes.

Parents met for one hour twice a week to work with the children. Tutoring was done during the school day and was scheduled around other activities such as reading and math. Tutoring was typically done one-to-one, but at times there could be two children to one tutor.

Evaluation. There is no systematic, formal evaluation of this program. The developer did informally assess the degree to which the program met the needs of the teachers and the children (Neuman, 1995). The responses from the schools were positive. However, there are no data to determine if the program increased the language and literacy skills of the children.

Dissemination Issues. In 1995, this program was based in five elementary schools in high poverty areas of Philadelphia. Tutors were trained by the VISTA volunteers who were themselves trained by a university reading researcher. There is no systematic training developed, and no manuals exist outlining the procedures to use the prop boxes.

Early Identification Program

The Early Identification Program (Early ID) is a kindergarten intervention program focusing on preliteracy skills developed by Robert Stark and his colleagues in the Reading, Ohio School District. The goal is to expose children to a wide variety of activities and skills that will help prepare them to learn to read when they reach the first grade.

The Early ID program uses parents, high school students, and other community volunteers to implement the program. The volunteers are not paid. Two half-time assistants are paid to schedule the volunteers and coordinate the services.

All kindergartners are screened on the Visual Motor Inventory (VMI), which is a perceptual motor assessment, and the Boehm, which is a cognitive assessment of readiness skills. Children who score at or below the 35th NCE on either of these tests are selected to participate in the program. The kindergartners are pulled out of their regular classes and tutored 4 times a week for 10 minutes each time.

Training of volunteers for the Early ID program is not extensive. There is an initial training during which the program is explained to the volunteers. The program is designed so that the volunteers work on a specific skill in the area of perceptual motor, fine motor, and cognitive concepts with the child. The activities are outlined in a handbook. The volunteers acquaint themselves with the activities and then with the child. No additional training is provided.

Evaluation. Data have been collected on each cohort of kindergartners for the past 10 years. Data reported here are from the 1995-1996 school year. Children selected to be in the program were compared to children who did not participate. Selection for program participation was based on poor performance on the VMI and Boehm. Therefore, the comparison group's pretest scores were higher than the treatment group's scores, making this group poor as a comparison group.

Data are reported in gain scores. For the children who were in the Early ID Program, scores increased 29.8 points on a visual motor skills assessment, 19.2 points on a fine motor skills assessment, and 19.3 points on the Boehm. Children who were in kindergarten but not in the Early Identification Program had gains of 5.4 points in visual perception, 0.3 points in fine motor skills, and 7.4 points in basic language skills. However, the children in the Early ID program still did not perform at the same level as the comparison group. Absolute scores are not reported, and it is uncertain whether gains are due to the Early ID program or to the effects of the kindergarten experience, which also emphasizes fine motor skills, visual perception, and

conceptual development. Test scores for young children are highly unstable, so there is a high probability that regression to the mean for the very low-scoring Early ID children accounts for all or some of the observed gains.

Dissemination Issues. There is a manual which outlines the activities that the children work on. Volunteers are expected to follow the sequence of activities. Two part-time assistants are paid to schedule the volunteers and coordinate the services. The total program cost is about $1500 per student. The program is currently being implemented in the Reading, Ohio School District only and has not been disseminated.

Books and Beyond

Developed in 1979 under the auspices of the Solana Beach School District in California, Books and Beyond is a program designed to encourage children to read more, watch TV less, and involve parents in children's reading for pleasure at home. Although Books and Beyond started as a parent-child reading program, the program has taken different forms as schools adapt it to fit their individual needs.

The goal of Books and Beyond is to create a positive reading environment, and thus, does not focus on individual children's reading problems. The program is implemented schoolwide in elementary and middle schools.

Parents and other community members such as policemen, firefighters, and business persons are recruited to participate in reading activities such as Read-A-Thons or hour-long, once-a-week Read-Ins. Volunteers also run after-school programs in which they read to and with the students. Parents participate in special workshops that introduce them to good children's literature and to the school library.

Given the intention of the program, volunteers receive minimal training. A school staff member is assigned to be in charge of Books and Beyond and coordinates the volunteers and the workshops for parents.

Evaluation. The evaluation consisted of a pre- and postsurvey that was administered to students and parents. In addition, students were requested to keep a TV viewing log for one week documenting the number of viewing hours. Participants in the Books and Beyond program were compared to children who did not participate in the program. After implementation of this program, children in the program watched less TV and were reading more compared to the control group. No measures of reading ability were administered.

The goal of this program is to increase recreational reading, not to provide one-to-one instruction for children who are having difficulty reading. The program has been successful in increasing reading behavior among participants and their families. However, children participating in this program most likely already knew how to read. Therefore, Books and Beyond may not be successful in reaching the children who are not reading.

Dissemination Issues. Books and Beyond is being disseminated nationally. There is a manual that can be purchased for $45.00. A trainer from Books and Beyond will come to a school or other community sites to provide training, but even this is optional.

Additional Programs Mentioned by *America Reads*

Among the programs described above, the Early Identification Program, Intergenerational Reading Program, Reading One-One, and Books and Beyond were mentioned in materials distributed by *America Reads*. The following programs are also on the *America Reads* list but do not have any evaluation data.

Read*Write*Now

Read*Write*Now is an initiative launched by the U.S. Secretary of Education, Richard Riley, and developed by a team of reading research experts directed by Richard Venezky at the University of Delaware. The goal of this program is to foster good literacy habits in children from a young age and to mobilize parents and volunteers to be involved in nurturing their children's love of reading and writing.

One component of Read*Write*Now is the Partners Tutoring Program, a one-to-one tutoring program that focuses on reading and writing for school-aged children in grades 1 through 6. The program consists of a set of materials and at least a half-day of training by the staff of Read*Write*Now. All the activities in the materials are planned for one-to-one tutoring with a high school student or an adult volunteer. Tutoring can be done during school or outside of school — for example, after school, evenings, or weekends. The Partners Tutoring Program suggests that tutors and students commit themselves to an initial 24 tutoring sessions over 12 weeks, which amounts to approximately two tutoring sessions of 35 minutes each per week.

In addition to this tutoring component, there is a national summer reading program which has been established by the Read*Write*Now initiative. Community volunteers, including former teachers, senior citizens, and high school students, along with the local libraries, sponsor a reading incentive program which challenges children to read 20 minutes per day and to be involved in a writing activity. Upon meeting the reading challenge, children are rewarded with an incentive such as a certificate from Pizza Hut or from other national business sponsors.

Evaluation. There is no evaluation of achievement effects conducted on this program.

Dissemination Issues. A kit of Read*Write*Now materials can be obtained through the Department of Education. The kit contains outlines of activities that can be done with children. In addition, there are suggestions for incentives. This is a program designed to involve children in reading. It is not intended to be used as a one-to-one tutoring program for children who are having difficulty learning to read, and in fact, the materials do not suggest how to work with a child who is struggling in learning how to read.

SLICE/AmeriCorps

SLICE is an AmeriCorps project developed in conjunction with the Simpson County Schools, a rural school district in Kentucky. One of the focuses of the program is to provide one-to-one tutoring services to children who are at risk for reading failure.

In the initial two years of this project, AmeriCorps members tutored children in the schools four times a week for 30 minutes. The focus has been on kindergartners and first and second graders. AmeriCorps volunteers received ongoing training in selecting appropriate literature, reading comprehension strategies, and techniques used in teaching phonics. A significant amount of the AmeriCorps volunteers' time has been spent on ongoing training. Mike Houston, the director of SLICE, has noted the importance of high quality training for the volunteers and has coordinated university reading researchers and school personnel to be a part of the volunteers' training.

As this program proceeds into its third year, the goal is to use the AmeriCorps volunteers to mobilize other community volunteers to provide services to the children. AmeriCorps volunteers will be reading coaches who will essentially work as tutor coordinators. The reading coaches will recruit new community volunteers and provide technical assistance to the tutors.

Evaluation. A pre-post evaluation was conducted on the SLICE program. Students were administered an informal reading inventory to determine the effects of the program. Houston, the program director, reports that students made gains in their reading skills. However, since there is no comparison group, it is impossible to determine if the students improved because of the tutoring intervention or because of ordinary class instruction or other factors.

Dissemination Issues. The SLICE program is in the development phase. There is no systematic training of the tutors to enable the program to be disseminated on a large scale.

Reach Out and Read (ROAR)

Reach Out and Read (ROAR) is not a one-to-one tutoring program. It was developed as a clinic-based intervention program designed by physicians at Boston City Hospital to expose and encourage early book use among parents of children at risk.

The program includes three components: 1) volunteers who read aloud to children in the waiting room; 2) counseling by a pediatrician about literacy development and the importance it plays in children's lives; and 3) distributing a book to each child who sees the physician. The program was designed so that the children would initially spend time with the reader in the waiting room. When the children moved to the examination room, the physician would talk to the child and the parent about the importance of reading and having books in the home. As an encouragement to read, each child was given a book to take home.

There is a program coordinator who organizes and administers the program. The program coordinator is typically a physician, child life worker, nurse, or volunteer. Training for the program coordinator consists of a series of lectures and workshops. The lectures present issues regarding literacy development. The workshops focus on ways to encourage parents to engage their children with literacy activities as well as helping parents understand age-appropriate expectations for reading.

Volunteers who read to the children in the waiting room were trained in a one-hour session that focused on flexibility in reading to children of different ages and with different interests. For example, volunteers are taught to not always stick to the text if they think that the children will not understand it, or to stop and ask questions about the story as they are reading. There is a training manual which documents how to implement ROAR.

In addition to training costs, books are needed to be read in the waiting room as well as to be distributed to the children to take home from their visit.

Evaluation. A pre-post evaluation was conducted on the ROAR program (Needlman, Fried, Morley, Taylor, & Zuckerman, 1991). Comparisons were made between families who recalled being involved in the study and those who did not recall the components of the intervention.

Each family was administered a structured interview in which they detailed the kinds of activities they participate in with their child. The main finding from the pre-post data is that parents who were given books during their visit to the clinic and recalled getting the book reported an increase in book reading when they were interviewed during their next visit.

One serious problem with this evaluation is that the comparison group did get the treatment but did not recall getting it. Of the 77 families involved, 32 families did not recall getting a book or hearing what the physician said about the importance of reading. Perhaps the intervention needs to be more salient to have a more substantial effect.

Dissemination Issues. Currently, the ROAR program is being disseminated throughout the country. Initial training and start-up costs are minimal and are currently being subsidized by large grants from private foundations.

Cabrini-Green Tutoring Program

The Cabrini-Green Tutoring Program is a grassroots program that was developed and implemented 31 years ago near the Cabrini-Green housing projects in Chicago to serve the children of this high poverty community. This one-to-one tutoring program serves 480 children a week and has 480 volunteer tutors. It operates three nights a week from 5:30-7:00 p.m. Kindergartners through 6th graders are tutored once a week for 1.5 hours.

The goal of the Cabrini-Green Tutoring Program is to build literacy skills. The tutors work primarily with the children on homework that the children bring from school. However, if a child does not have homework, the tutors read with or to the children, and have a variety of projects such as art or writing projects that they work on. The tutoring center is equipped with a library and material for projects.

All tutors are unpaid volunteers. Most are professionals who work in downtown Chicago. Parents and other community people are also volunteers. All tutors go through a training and orientation session, take a tour of the facility, and speak with the program

coordinators and experienced tutors before they begin working with the children. Volunteers also attend three additional workshops throughout the year.

The Cabrini-Green tutoring program has forged a relationship with Reading Is Fundamental and has worked to obtain free books for the children.

Evaluation. There is no evaluation of the program.

Dissemination Issues. The program has little information documented. Dissemination in its current form is not feasible.

Hilliard Elementary School Tutoring Program

Hilliard Elementary School is located in a high-poverty, predominately African American neighborhood in Houston. For the past three years, Hilliard has been operating a tutoring program to work with first through fifth graders who are at risk for school failure. The tutoring program focuses on various subject areas, including reading.

Teachers train parent volunteers to be a part of the tutoring program. The focus of the tutoring is on the Texas Assessment of Academic Skills (TAAS) and Essential Elements of the Texas state curriculum. Parents team with teachers in the classroom and also in the after-school and Saturday program. Certified teachers guide the training of the parents. As part of the Hilliard tutoring program, the children and parents participate in special projects such as writing storybooks and doing a schoolwide science project.

There are no training manuals and most of the information is passed orally from the teachers to the volunteers.

Evaluation. There is no evaluation of the program.

Dissemination Issues. There is no formal training of the tutors; therefore, dissemination of this program is not practical.

Growing Together

Growing Together is a community-based tutoring program in Washington, D.C. It serves 100 students from 12 area schools. Each student is tutored for a two-hour session once a week. The focus of the program is on reading, writing, and math skills.

Community volunteers work one-to-one with students under the expert guidance of a teacher/tutor. The tutor training consists mostly of on-line feedback from an experienced tutor who observes the tutoring sessions and provides input. In Growing Together, the tutors use a variety of materials from different reading programs, including SRA and other structured phonics programs. There is no tutoring manual and most of the guidance to the tutor comes from the project director and teacher/tutors.

Evaluation. There is no evaluation of the program.

Dissemination Issues. This is a grassroots tutoring program serving a small number of children. There is no tutoring manual, no formal tutor training program, and no evaluation of this program. Dissemination would not be practical at this time.

Conclusion

At this stage, there is a surprising lack of evidence about achievement effects of one-to-one tutoring by volunteers. Only two programs, the Howard Street Tutoring Program and the School Volunteer Development Project, compared students receiving volunteer tutoring to similar students not receiving tutoring. Only the Howard Street Tutoring Program is still in existence. The studies of these programs involved a total of only 50 experimental and 50 control students in small-scale experimental programs. Evidence from 100 children does not provide an adequate basis for national policy.

The remainder of the tutoring programs reviewed, including all those named in materials distributed by *America Reads*, either present no evidence at all or present evidence that due to weakness in the evaluation designs cannot be interpreted as reporting program effectiveness. Evidence from two programs showed a correlation between the number of tutoring sessions and learning gains, but such evaluations beg the question of why some children received many more tutoring sessions than others. Such data are never acceptable as program evaluations in education. Similarly, one program compared gain scores for two very different groups, another procedure that does not meet the most minimal standards of experimental design.

It is important to note that there is no evidence to suggest that volunteer tutoring is *not* effective. On the surface, many of these programs seem logical and worthwhile. But there is insufficient evidence that the programs improve children's reading achievement, and even less evidence concerning what forms of volunteer tutoring programs are most likely to work.

Extrapolating from the research on one-to-one tutoring programs delivered by teachers and paraprofessionals is clearly inappropriate, although some of the "volunteer" programs that pay the volunteers, train them well, and have them work in close cooperation with classroom teachers may begin to approximate the status of paraprofessional tutoring programs.

America Reads, if fully funded and implemented, may have a beneficial impact on reading achievement on primary-age children. Yet it is far too early to know what form the tutoring programs funded by *America Reads* should take. Should tutors be paid? Do tutors' own education and background matter? How much training do tutors require? Who should do the training? How much monitoring and supervision is enough? Are specific student materials essential? If so, what kinds of materials would be appropriate and effective? How important are diagnosis and prescription, and who should do it? Should tutoring activities be closely connected to the classroom instruction or separate from it? Should they take place during school hours or after school? Are there particular types of students most and least likely to benefit from tutoring by volunteers? These and many other fundamental questions should be answered as soon as possible if *America Reads* is to fulfill its potential in moving America's children toward the goal of all children reading by third grade.

Questions in Need of Evidence

America Reads can provide a great opportunity to learn more about volunteer reading tutors in schools, provided that money is allocated to evaluate these programs. For programs that are already developed and implemented but do not have an evaluation, there is a need to conduct evaluations of their effectiveness. For programs that will be developed at various schools, an evaluation design needs to be a part of the initial planning phase of the program.

The programs reviewed in this report share some common features, but it is not known whether these components contribute to instructional effectiveness. Having a designated coordinator who knows about reading and reading instruction appears to be an important component in a volunteer tutoring program. Having a knowledgeable person train the volunteers to provide a basic understanding of the reading process and assess and provide feedback to volunteers on their tutoring sessions seems essential. These elements were emphasized in the Howard Street Tutoring program as well as in Book Buddies, Reading One-One, and HOSTS. However, as sensible as this seems, we do not have empirical evidence that a reading coordinator contributes to the success of a volunteer tutoring program.

Training of the volunteers was also a consistent component in all programs reviewed. In some cases the training came from the tutoring program coordinator who was a reading

specialist; in other cases, training was provided by other trained personnel such as university reading researchers. Questions need to be addressed regarding how much training is needed, how frequently it should occur, and in what format the training should be presented.

An important issue is whether using materials that are separate from the classroom reading program is critical for making a tutoring program effective. Or should classroom materials be used in tutoring, or is a combination of materials most effective? Along with the materials issue comes a more fundamental question regarding the approach that is used to teach reading. Reading is typically taught somewhere on a continuum from phonics to whole language. Should the volunteer tutoring program be consistent with the approach that is presented in class? From work on Reading Recovery and Success for All, there is some evidence to suggest that a coordination between tutoring approaches and classroom instruction is beneficial. However, this is an empirical question that needs to be explored.

Consistency and frequency of volunteer contact with students is another important factor that needs to be evaluated. Does it matter if a student is seen by a different tutor? Does a student need to be tutored five times a week or is two or three times sufficient?

Another important issue is who should the volunteer tutor? Should they target the most needy students as in the Book Buddies, Intergenerational Reading, and Howard Street Tutoring programs, or should they target children who are not the most needy but who could benefit from additional resources, such as those in the Reading Recovery/AmeriCorps program.

If money is allocated to evaluate the programs in *America Reads*, important questions regarding the role that volunteer tutors can play in facilitating children's reading can begin to be answered. All schools in America could benefit from additional resources, in particular, additional personnel. However, personnel who serve as tutors or reading instructors need to be trained in order to be an effective asset to schools. Untrained volunteers could possibly be more of a hindrance in a school than a help.

If money is allocated to make *America Reads* a reality, a specific amount of money needs to be set aside to develop replicable models and to evaluate the effectiveness of these programs in rigorous research designs. The best conceptualized program without a credible evaluation is of little value. We need to understand if volunteers can make a significant contribution to our children's literacy development.

The real challenge of *America Reads* is to implement effective, well-evaluated, and readily replicable programs in schools to increase the level of literacy learning of our nation's children.

References

Cohen, P.A., Kulik, J.A., & Kulik, C.L.C. (1982). Educational outcomes of tutoring: A meta-analysis of findings. *American Educational Research Journal, 19*, 237-248.

DeFord, D.E. (February 26, 1997). Personal communication.

Farkas, G. (1996). *Human capital or cultural capital? Ethnicity and poverty groups in an urban school district*. New York: Aldine de Gruyter.

Gallegos, G. (1995). *Investing in the future: HOSTS evaluation for the Pasadena Independent School District*. Vancouver, WA: HOSTS Corporation.

HOSTS Corporation (1994). *Independent evaluations of the HOSTS structured mentoring program in language arts*. Vancouver, WA: Author.

Invernizzi, M., Juel, C., & Rosemary, C.A. (1996/1997). A community volunteer tutorial that works. *The Reading Teacher, 50* (4) 304- 311.

Invernizzi, M., Rosemary, C.A. Juel, C. & Richards, H.C. (in press). At-risk readers and community volunteers: A three year perspective. *Journal of the Scientific Studies of Reading: The Official Journal of the Society for the Scientific Study of Reading*.

Johnston, F., Juel, C., & Invernizzi, M. (1995). *Guidelines for volunteer reading tutors*. Charlottesville, VA: P.S. Publishing Services.

Needlman, R., Fried, L.E., Morley, D.S., Taylor, S., & Zuckerman, B. (1991). Clinic-based intervention to promote literacy. *American Journal of Diseases of Children, 145*, 878-882.

Neuman, S.B. (1995). Reading Together: A community-supported parent tutoring program. *The Reading Teacher, 49* (2), 120-129.

Neuman, S.B., & Gallagher, P. (1994). Joining together in literacy learning: Teenage mothers and children. *Reading Research Quarterly, 29*, 382-401.

Morris, D. (1995). *First Steps: An early reading intervention program*. (ERIC Documentation Reproduction Services No. ED 388 956).

Morris, D. (1990). *The Howard Street Tutoring Manual: Case studies in teaching beginning readers*. Boone, NC : Appalachian State University Reading Clinic.

Morris, D., Shaw, B., & Perney, J. (1990). Helping low readers in grade 2 and 3: An after-school volunteer tutoring program. *The Elementary School Journal, 91* (2) 132-150.

Pinnell, G.S., DeFord, D.E., & Lyons, C.A. (1988). *Reading Recovery: Early intervention for at-risk first graders*. Arlington, VA: Education Research Service.

Robledo, M. del R. (1990). *Partners for valued youth: Drop-out prevention strategies for at-risk language minority students*. Washington, DC: U.S. Department of Education.

Shanahan, T., & Barr, R. (1995). Reading Recovery: An independent evaluation of the effects of an early instructional intervention for at-risk learners. *Reading Research Quarterly, 30* (4), 958-996.

Slavin, R.E., Madden, N.A., Dolan, L.J., & Wasik, B.A. (1996). *Every child, every school: Success for All*. Newberry Park, CA: Corwin.

Topping, K., & Whitely, M. (1990). Participant evaluation of parent-tutored and peer-tutored projects in reading. *Educational Research, 32* (1), 14-32.

Wasik, B.A., & Slavin, R. E. (1993). Preventing early reading failure with one-to-one tutoring: A review of five programs. *Reading Research Quarterly, 28*, 178-200.

Wilbur, J. (1995). A gift of time: HOSTS: Help One Student to Succeed. *Partnerships in Education Journal, 9* (3), 1-5.

APPENDIX

PROGRAM ELEMENTS

Program Name	Howard Street Tutoring Program	School Volunteer Development Project
Age/Grade	Grades 2 and 3	Grades 2 and 6
Student Eligibility	Poor performance on informal reading inventory	Poor performance on reading as identified by the teacher
Description of Volunteers	Non-paid adults and college students	Non-paid community volunteers
Other Personnel Required	A reading specialist/teacher to supervise volunteers	A reading specialist/teacher to supervise volunteers
Program Description	One hour, one-to-one tutoring twice a week. Session includes reading familiar material, word recognition, unfamiliar text, and writing.	One-half hour, one-to-one tutoring four to five times a week
Training	On-the job training by supervisor. Lesson plans are made by the supervisor.	On-the-job training by supervisor
Materials Required	Basal readers & trade books; Tutoring manual	Materials were developed to meet students needs including multi-media materials
Cost	Cost of materials and salary of reading specialist/teacher	Cost of materials and the salary of the reading specialist
When Tutoring Occurs	After school	In-school pull-out program
Evaluation Data	Tutored and comparison group of 17 matched pairs. Tutored group performed better than the comparison group on word recognition and passage reading.	Students randomly assigned to tutored and untutored groups. Tutored group performed better than the comparison group on the Metropolitan Achievement Test.
Contact Person	Darrell Morris (704) 262-6054	Program no longer operating.

Program Name	Book Buddies	Reading One-One
Age/Grade	Grade 1	Grades 1, 2, and 3
Student Eligibility	Teacher identification of students with reading problems	Teacher selection and poor performance on the Iowa Test of Basic Skills
Description of Volunteers	Non-paid community volunteers	Paid college students and community volunteers
Other Personnel Required	Masters level reading coordinators	"Lead tutors" who typically are college students
Program Description	One-to-one tutoring twice/week for 45 minutes. Tutoring session is highly structured and volunteers are observed by the reading coordinator.	One-to-one tutoring 3-4 times week for 30 minutes; Tutoring sessions follow a specific format; Emphasis is on letter and word mastery.
Training	8 hours of initial training by reading researchers and reading coordinators; Ongoing training.	Volunteers are assessed on knowledge of the manual plus 4 to 6 weeks observations.
Materials Required	Storybooks and other materials for writing and working with words; Tutoring manual.	Basal readers plus Sunshine books from the Wright Group; Tutoring Manual
Cost	$595/child, including cost of supervisor and materials	Salary of tutors plus materials
When Tutoring Occurs	During the school day	During the school day
Evaluation Data	Compared children who received 40 or less tutoring sessions to those who received 40 to 63 sessions; Children with more tutoring performed better. **No comparison group**	Positive correlation of number of tutoring sessions with performance on Woodcock. **No comparison group**
Contact Person	Marcia Invernizzi (804) 924-1380	George Farkas (214) 883-2937

Program Name	Help One Student to Succeed (HOSTS)	Reading Recovery with AmeriCorps
Age/Grade	Grades 1 to 6	Grade 1
Student Eligibility	Identified by teacher and diagnostic assessment	Children who are performing low but have ***not*** been selected for Reading Recovery
Description of Volunteers	Non-paid community volunteers	Paid AmeriCorps volunteers
Other Personnel Required	Certified teacher to assess and develop diagnostic plan	Reading Recovery teacher/leader
Program Description	One-to-one tutoring following skills that have been identified in diagnostic plan; Emphasis on activities that address isolated skills.	One-to-one tutoring program in which volunteers are trained in many of the Reading Recovery tutoring techniques.
Training	Initial training of program coordinator. Coordinator trains volunteers.	150 hours of training plus on-line supervision of tutoring sessions
Materials Required	Over 3,000 materials to support skills development.	Storybooks and Reading Recovery materials
Cost	$5,000 per school for materials plus certified teacher	AmeriCorps salaries plus Reading Recovery teacher's time plus materials
When Tutoring Occurs	During or after school	During school
Evaluation Data	Pre-and posttest data on children's NCE scores. NCE gains exceed those of others in the school and state. **No comparison group**	In progress; Reading Recovery staff report that children in AmeriCorps tutoring have made gains in NCEs. **No comparison group**
Contact Person	HOSTS Corporation (360) 260-1995	Diane DeFord (614) 292-7807

Program Name	Intergenerational Reading Program	Reading Together/VISTA
Age/Grade	Grade 1	Kindergartners and pre-first graders
Student Eligibility	Identified by teacher as at risk for reading problems	Students in high poverty schools
Description of Volunteers	Senior Citizens; some Foster Grandparent paid volunteers	Paid VISTA volunteers
Other Personnel Required	Certified teacher to train and supervise tutors	Program coordinator
Program Description	One-to-one tutoring 3 times/week for 45 minutes; Focus is on reading connected text, working on phonics and writing.	Parents work with children 1 hour twice/week promoting literacy and language development in disadvantaged children.
Training	Initial training plus ongoing twice/monthly meeting and in-services	Training involves instruction in developing prop boxes and demonstrating techniques to parents
Materials Required	Storybooks and word strategy materials	Prop boxes which include books
Cost	Salary for certified teacher plus materials	Program coordinator, paid volunteers, plus materials for prop boxes
When Tutoring Occurs	During school	After school
Evaluation Data	Data collection is taking place in spring of '97. Random assignment of children to tutored and non-tutored groups.	No evaluation
Contact Person	Jerome Kagan & Darci Vogel (617) 838-0791	Susan Neuman (215) 204-8001

Program Name	Early Identification Program	Books and Beyond
Age/Grade	Kindergartners	Elementary students
Student Eligibility	Performance below the 35th NCE on the Boehm and VMI	All students
Description of Volunteers	Non-paid parent and community volunteers	Non-paid parents and community volunteers
Other Personnel Required	Two part-time program coordinators	Person to organize the program
Program Description	One-to-one tutoring on perceptual/motor and fine motor skills, and categorization concepts as well as readiness skills	Reading incentive program; not one-to-one instruction. Goal is to motivate and interest children in reading.
Training	Minimal initial training. Manual of activities is used as a guide.	Training is not required.
Materials Required	Manual which contains sequenced activities	Manual outline the activities.
Cost	Salaries of coordinators $1500/student plus materials	Manual costs $45. 100 posters cost $25. If requested, training is $350/day.
When Tutoring Occurs	During half-day kindergarten	Both during and after school
Evaluation Data	Tutored group compared to children who performed better than the tutored group. Gain scores showed that tutored group improved but still performed worse than non-tutored group.	Children in program watched less TV and read more compared to a comparison group.
Contact Person	Robert Stark (513) 483- 6754	Books and Beyond (619) 755-3823

Program Name	Read*Write*Now	SLICE/AmeriCorps
Age/Grade	Birth to 6th with an emphasis on K through 6th	Kindergartners through grade 2
Student Eligibility	All students	Teacher selection
Description of Volunteers	Non-paid parents, community volunteers, and teachers	Paid AmeriCorps volunteers
Other Personnel Required	Program coordinator	Program coordinator
Program Description	Tutoring at least once a week for 30 minutes. Students are encouraged to read 5 times a week.	One-to-one tutoring 4 times/week for 30 minutes. Tutors focus on learning to read through reading and writing.
Training	Minimum of half-day training; This can vary by site. There is a tutor guide.	2.5 days plus ongoing training; Tutors are observed and there are weekly meetings and in-services.
Materials Required	Storybooks and other reading materials	Trade books
Cost	Salary of on-site coordinator; this also can be a volunteer position.	Paid volunteers, program coordinator, training costs ($2000), and materials
When Tutoring Occurs	After school or weekends	During school
Evaluation Data	There is no evaluation of achievement effect. There is process evaluation for the 1996 summer program.	Pre-post evaluation **No comparison group**
Contact Person	U.S. Department of Education (800) USA-LEARN	Mike Houston (502) 586-2804

Program Name	Reach Out and Read (ROAR)	Cabrini-Green Tutoring Program
Age/Grade	Three-year-olds through grade 1	Kindergartners through grade 6
Student Eligibility	Children in health clinics whose parents agree to participate	All children
Description of Volunteers	Pediatricians and health professionals	Volunteers from businesses and organizations in Chicago
Other Personnel Required	Volunteer to read to children in hospital waiting room	2 full-time program coordinators
Program Description	Health clinic based intervention; Pediatrician encourages literacy during check-up. Children are given a book to take home during one visit.	One-to-one tutoring program focusing on helping children with homework; Children meet 1.5 hrs. once/week. Other activities center around building literacy skills.
Training	Pediatrician or other health care provider are given day of training.	Initial 2-hour training plus 3 workshops throughout the year
Materials Required	Storybooks	Children bring homework. Facility contains library and other materials.
Cost	Minimal costs to train personnel and provide books to each child; Private grant support.	Two full-time program coordinators; Private funds support this project.
When Tutoring Occurs	During visit to health clinic	Evenings 5:30-7:00 p.m.
Evaluation Data	Pre-post evaluating increase of book reading after intervention; Families who recalled getting info reported reading more to children. Weak evaluation **No comparison group**	No evaluation
Contact Person	Abby Jewkes (617) 534-5701	Jill Crystal (312) 467-4980

Program Name	Hilliard Elementary School Tutoring Program	Growing Together
Age/Grade	Grades 1 to 5	Grades 1 to 5
Student Eligibility	All children	Failing or below grade level
Description of Volunteers	Paid certified teachers along with non-paid parent volunteers	Non-paid adults and college students
Other Personnel Required	Program coordinator	Program director experienced in teaching reading
Program Description	Parent volunteers assist teachers in classroom and after-school tutoring program. Teachers monitor the parents' tutoring sessions.	One-to-one instruction once a week for 1 hr. focusing on phonics and reading comprehension; Tutoring sessions are monitored by director. Tutoring is done in other subject areas.
Training	On-the job training is provided by the certified teachers with whom the volunteers are working.	Tested on tutoring manual, orientation sessions and ongoing workshops.
Materials Required	Basals and other materials from school are used.	Reading materials and tutoring manual
Cost	Small stipend for teacher plus materials for activities	Program director and materials
When Tutoring Occurs	During and after school	After school, evenings, and weekends
Evaluation Data	No evaluation	No evaluation
Contact Person	Rufus Allen (713) 635-3085	Teresa Knudson (202) 882-5359

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